

REMARKS

Claims 11-19 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for the reasons noted in the official action. The rejected claims are accordingly rewritten, by the above new claims, and the presently pending claims are now believed to particularly point out and distinctly claim the subject matter regarded as the invention, thereby overcoming all of the raised § 112, second paragraph, rejections.

The drawings are amended, per the attached Submission, to overcome a few noted informalities contained therein. New formal drawings, incorporating the requested amendments, will follow once the requested drawing amendments are approved by the Examiner. If any further amendment to the drawings of this application is believed necessary, the Examiner is invited to contact the undersigned representative of the Applicant to discuss the same.

This application is also rejected under 35 U.S.C. § 112, first paragraph, for the reasons noted in the official action. The inadequate written description rejection is acknowledged and respectfully traversed in view of the following remarks.

With due respect to the Examiner's assertion that the Applicant's specification fails to teach one of skill in the art how to make or use the claimed invention, the Applicant believes that the specific function and operations with which the Examiner takes issue, in paragraphs 2 a-d (for example, "how control signals are formed"), are well known to those of skill in the art. In particular the Applicant notes that the known electronic and mechanical transmission control apparatus shown in Fig. 1 and used in the present invention are well known. Additionally, it is also well known to those of ordinary skill in the art, how to form transmission control signals from command signals. Evidence of how well known this is can be found for example in the cited reference Takahashi '100, which simply states at column 3, lines 36-42, ".....the control unit 10 produces a shift control signal S_s and sends this signal S_s to a valve controller 12. In accordance with the shift control signal S_s, the valve controller 12 sends a valve actuator signal S_v to an automatic transmission 13 to obtain a desired speed ratio

represented by the shift control signal." In other words, forming electronic signals for directly controlling the transmission in any control system from any type of command signal, be it voice, a push button or even a shift lever is well known and can be accomplished in a myriad of well known ways. For this reason, and also that the Applicant is not claiming how to form control signals from command signals, the Applicant believes that a person of even reasonable skill in the art would be able to achieve the Applicant's presently claimed invention as it is disclosed in the specification, drawings and claims.

With respect to the Examiner's inquiry regarding how the control signals derived from the driver's voice commands are superimposed onto the shift signals calculated by the transmission control, the Applicant notes that the term superimposed may be better interpreted from the original German translation as, changing or modifying. Thus, the new claim 21 now more clearly recites the step of, ".....changing the shift signal in the transmission control according to the transmission control signal generated by the driver's voice command to obtain a new shift signal for said transmission (2).....". Again, it is well known for a transmission control to calculate electronic shift signals based on sensed vehicle parameters, e.g., vehicle speed, throttle opening, differences in wheel speed during cornering etc. Furthermore, how this electronic shift signal is modified is well known in the art. Changing such a calculated shift signal to obtain a new shift signal based on an electronic signal derived from a voice command, is essentially no different than modifying or changing the shift signal based on any another input, e.g., a command signal from a push button or shift lever or even another measured vehicle characteristic. As the accomplishment of changing and modifying such electronic signals is well known in the art such that a person of ordinary skill would be able to achieve the presently claimed invention without undue experimentation, the Applicant believes the present specification to be enabling.

Turning to the remaining §112 first paragraph issues which the Examiner raises in regards to claims 12 -19, now claims 22-30, it is readily apparent that a reference voice command could be equated to a command signal which could change the shift command

signal to either add or reduce the number of gear steps during a change of reduction ratio in the transmission, either in up shifts or down shifts. An example would be when coming to a relatively quick stop in a vehicle and requiring a large reduction ratio, downshifting could be accomplished by a verbal command allowing only one gear step, and thus obtaining engine braking of the vehicle as can often only be undertaken in a standard transmission.

Respectively, in regards to claim 13, now claim 22, a voice command signal may be equated to specific driving modes whereby the calculated shift control signals in the transmission control are changed to increase, for instance, the economy of the vehicle. As discussed above, as such changing or modification of the calculated shift control signals is easily accomplished by those of skill in the art, according to the desired effect such as economy are well known in the art, the Applicant believes the present specification to be enabling. As the remainder of the claims are allegedly subject to the same deficiencies, the Applicant believes these claims as rewritten to overcome the § 112, first paragraph, rejections for the same reasons as set forth above with respect to claims 21 and 22.

In view of the above arguments and amendments the Applicant believes that the present specification is more than sufficiently enabling to those of ordinary skill in the art, such that one of skill in the art would easily be able to implement the claimed invention without undue experimentation. Thus, the Applicant respectfully requests withdrawal of the inadequate written description rejection.

Claims 11 and 20 are rejected, under 35 U.S.C. § 102(b), as being anticipated by Takahashi '100. The Applicant acknowledges and respectfully traverses the raised anticipatory rejection in view of the following remarks.

As the Examiner is aware, in order to properly support an anticipation rejection under 35 U.S.C. § 102(b) the cited reference must disclose each and every feature of the presently claimed invention. Most importantly, different from the cited reference, in the presently claimed invention, the driver has the possibility to influence the shifting of the transmission before it is executed. This means that the driver does not have to wait until a shift has been accomplished

by the transmission. Thus, the driver can influence the actual shifting before the shift occurs, e.g., by prohibiting a shift, because it is unnecessary or disadvantageous. This is not possible in the cited reference, only a correction of an already accomplished actual transmission shift is possible in Takahashi '100.

In order to emphasize this point, the Applicant now specifically recites in claim 21, ".....changing the shift signal in the transmission control according to the transmission control signal generated by the driver's voice command to obtain a new shift signal and executing the transmission shift solely according to the new shift signal which is appropriate for the driving situation.....". Unlike Takahashi '100, in the present invention the original shift signal, calculated by the transmission control system, is not carried out by the transmission but is changed by the driver command signal before a shift is carried out in the transmission. The calculated shift is thus changed in such a way as to produce a new shift signal based on the voice command, which is then, and only then executed by the transmission, so that physical correction of the transmission shifting is preempted.

Takahashi '100 shows a shift control system which permits the driver to influence the shifting pattern of the transmission only after a shift has been performed by the transmission. Based on driver desire, the driver has the possibility to accept this executed shift pattern or to give information to the control system whether the shift was too early or too late. The driver has different possibilities to enter this information into the control system. One of these possibilities is arguably a voice recognition input device as described in column 3, lines 7 and 8. However, this possibility pertains only after the shifting has already been executed. The Takahashi '100 shift control system only permits the driver to judge during actual driving whether the timing of a shift is proper or not and then to modify the shift pattern.

Claims 13 is rejected, under 35 U.S.C. § 103(a), as being unpatentable over Takahashi '100 in view of Graf '420. As claim 13, now claim 23, is dependent upon claim 21 which is believed allowable in view of the above amendments and remarks, the Applicant believes this claim to be allowable as well and thus no further discussion is believed necessary.

Claims 17 and 18 are rejected, under 35 U.S.C. § 103(a), as being unpatentable over Takahashi '100 in view of Everhart et al. '347 and further in view of Fujimoto et al. '707. As claims 17 and 18 now claims 27 and 28 are also dependent upon claim 21 which is again believed allowable in view of the above amendments and remarks, the Applicant believes these claims to be allowable as well and thus no further discussion is believed necessary.

If any further amendment to this application is believed necessary to advance prosecution and place this case in allowable form, the Examiner is courteously solicited to contact the undersigned representative of the Applicant to discuss the same.

In view of the above amendments and remarks, it is respectfully submitted that all of the raised rejection(s) should be withdrawn at this time. If the Examiner disagrees with the Applicant's view concerning the withdrawal of the outstanding rejection(s) or applicability of the Takahashi '100 reference, the Applicant respectfully requests the Examiner to indicate the specific passage or passages, or the drawing or drawings, which contain the necessary teaching, suggestion and/or disclosure required by case law. As such teaching, suggestion and/or disclosure is not present in the applied references, the raised rejection should be withdrawn at this time. Alternatively, if the Examiner is relying on his/her expertise in this field, the Applicant respectfully requests the Examiner to enter an affidavit substantiating the Examiner's position so that suitable contradictory evidence can be entered in this case by the Applicant.

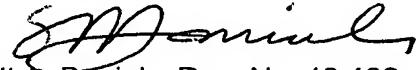
In view of the foregoing, it is respectfully submitted that the raised rejections should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

The Applicant respectfully requests that any outstanding objection(s) or requirement(s), as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

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Respectfully submitted,



Scott A. Daniels, Reg. No. 42,462

Customer No. 020210

Davis & Bujold, P.L.L.C.

Fourth Floor

500 North Commercial Street

Manchester NH 03101-1151

Telephone 603-624-9220

Facsimile 603-624-9229

E-mail: patent@davisandbujold.com

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By: 

Print Name: Scott A. Daniels